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LISTING OF THE CLAIMS

The claims have been amended. A complete listing of the claims, including their current status, is set forth below.

In the Claims:

1. (Currently amended) An array comprising at least one chromosome structural region oligonucleotide feature, **wherein said chromosome structural region oligonucleotide feature comprises an oligonucleotide that specifically binds to a structural region of a single chromosome of a mammalian cell and does not specifically bind to structural regions of other chromosomes of said mammalian cell**.

2. (Original) The array according to Claim 1, wherein said chromosome structural region is chosen from a centromeric region and a telomeric region.

3. (Original) The array of Claim 1, wherein said array comprises both centromeric and telomeric chromosome structural region oligonucleotide features.

4. (Original) The array of Claim 1, wherein said array comprises chromosome structural region oligonucleotide features for a plurality of chromosomes of a cell.

5. (Original) The array of Claim 4, wherein said array comprises a set of chromosome structural region oligonucleotide features for all chromosomes of said cell.

6. (Original) The array of Claim 1, wherein said array comprises chromosome structural region oligonucleotide features for detecting both telomeres of a chromosome.

7. (Original) The array of Claim 1, further comprising at least one chromosome non-structural region oligonucleotide feature.

8. (Original) The array of Claim 7, wherein said at least one chromosome non-structural region oligonucleotide feature is interspersed with said at least one chromosome structural region oligonucleotide feature.

9. (Original) The array of Claim 8, wherein said at least one chromosome non-structural region oligonucleotide feature is on a separate part of said array to said at least one chromosome structural region oligonucleotide feature.

10. (Withdrawn) A method for determining chromosome copy number in a cell, comprising:

contacting a first population of labeled nucleic acids made from a chromosomal composition of a test cell with an array of Claim 1; and

evaluating binding of said nucleic acids to said feature of said array relative to a reference level of binding.

11. (Withdrawn) The method of Claim 10, wherein said reference level of binding is binding of a second population of nucleic acids made from a reference chromosome composition of a reference cell to said feature.

12. (Withdrawn) The method of Claim 11, wherein said test and reference cells are cancerous and non-cancerous cells, respectively.

13. (Withdrawn) The method of Claim 12, wherein said test and reference cells are mammalian cells.

14. (Withdrawn) The method of Claim 13, wherein said test and reference mammalian cells are human cells.

15. (Withdrawn) The method of Claim 10, wherein said array contains chromosome structural region oligonucleotide features for detection of an entire complement of chromosomes of said test cell.

16. (Withdrawn) The method of Claim 10, wherein said contacting step includes contacting said population of nucleic acids to said array under stringent binding conditions.

17. (Withdrawn) A method for detecting abnormal chromosome copy number in a cell, comprising:

contacting a first population of labeled nucleic acids made from a chromosomal composition of a test cell with an array of Claim 1; and

evaluating binding of said nucleic acids to said feature of said array relative to a reference level of binding;

wherein greater or lesser binding of said first population of labeled nucleic acids to said feature as compared to said reference level of binding indicates abnormal chromosome copy number in said test cell.

18. (Withdrawn) The method of Claim 17, wherein said reference level of binding is a level of binding of a second population of nucleic acids made from a reference chromosome composition of a reference cell to said feature.

19. (Withdrawn) The method of Claim 18, wherein said first and second cells are cancerous and non-cancerous cells, respectively.

20. (Withdrawn) The method of Claim 19, wherein said cells are human cells.

21. (Withdrawn) A method of assaying a sample comprising:

(a) contacting an array according to Claim 1 with said sample; and

(b) detecting the presence of binding complexes on the surface of said array to assay said sample.

22. (Withdrawn) The method according to Claim 21, wherein said method is a comparative genomic hybridization assay.

23. (Withdrawn) A method comprising transmitting data from a method of Claim 21 from a first location to a second location.

24. (Withdrawn) The method of Claim 23, wherein said second location is a remote location.

25. (Withdrawn) A method comprising receiving a transmitted result of a reading of an array obtained according to the method Claim 21.

26. (Original) A kit for assessing chromosome copy number in a cell, comprising:

an array according to Claim 1; and

instructions for using said array to assess chromosome copy number in a cell.

27. (Original) The kit of Claim 26, further comprising labeling reagents for labeling a chromosomal sample.

28. (Original) The kit of Claim 26, further comprising a set of primers for labeling a centromere or a telomere of said chromosome.

29. (Original) The kit of Claim 27, wherein said labeling reagents are for distinguishably labeling two chromosomal samples.

30. (Withdrawn) A computer-readable medium comprising:

programming for analyzing data provided by the method of Claim 10.

31. (Withdrawn) The computer-readable medium of Claim 30, wherein an output of said programming is a chromosome copy number.

32. (Withdrawn) A computer comprising the computer-readable medium of Claim 31.

33. (Withdrawn) A computer implemented method, comprising:
evaluating data produced by the method of Claim 10; and
determining the copy number of a chromosome.